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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,742	09/24/2001	Yukio Yamakawa	KANEBO CASE	7745
7590	01/21/2004			
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EXAMINER BEFUMO, JENNA LEIGH				
ART UNIT		PAPER NUMBER		
1771				

DATE MAILED: 01/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/890,742

Applicant(s)

YAMAKAWA ET AL.

Examiner

Jenna-Leigh Befumo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) 2 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- ☐ Interview Summary (PTO-413) Paper No(s). _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. The Amendment submitted on September 8, 2003, has been entered. Claims 1 and 3 have been amended. Therefore, the pending claims are 1 – 3.
2. The Affidavit under 37 CFR 1.132 filed September 8, 2003 is sufficient to overcome the rejection of claim 1 based upon JP 09188951A. The affidavit clearly shows that the nonwoven polyurethane fabric taught by JP 09188951A would not have the claimed tear strength.

Election/Restrictions

3. Applicant's election of Group I is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). Therefore, claim 2 is withdrawn from consideration as being drawn to a nonelected invention.

Claim Rejections - 35 USC § 112

4. Claims 1 and 3 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a nonwoven polyurethane fabric, does not reasonably provide enablement for specification, while being enabling for a polyurethane nonwoven fabric which is produced by using a polyurethane with a Shore A hardness of not less than 92 and a moisture content of 150ppm or less, melt-spinning the polymer into a filament and depositing and laminating the filaments in a sheet form at a temperature which is 35°C lower than the Vicat softening temperature, does not reasonably provide enablement for any polyurethane nonwoven fabric comprising filaments which are fused together having the claimed tensile elongation, recovery at 50% elongation, and tear strength properties. The specification does not enable any

person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. In other words, the specification only teaches how to make the final nonwoven fabric by using polyurethane with a Shore A hardness of not less than 92 and a moisture content of 150ppm or less, melt-spinning the polymer into a filament and depositing and laminating the filaments in a sheet form at a temperature which is 35°C lower than the Vicat softening temperature. Thus, there is no teaching how to make the polyurethane nonwoven fabric without using the specific polyurethane starting product.

The Applicant argues that this rejection should be withdrawn since the Applicant is not required to claim method limitations in a product claim, and the product can be claimed based on its physical properties alone (Response, pages 5 – 6). First, the Examiner did not suggest that the method limitations need to be added to overcome this specific rejection. Instead, the Examiner suggested that a product by process claim would help to claim the structure of the polyurethane fabric and help to overcome the 112 2nd rejection, which will be addressed later in this action.

Second, it is in fact the physical structure and composition of the polyurethane itself which is at issue. The specification discloses that the polyurethane nonwoven fabric with the claimed properties is produced from polyurethane have a Shore A hardness of not less than 92 and a moisture content of 150ppm or less. Thus, the polyurethane fabric described in the specification is not be produced from any general type of polyurethane, but instead from a specific polyurethane with a specific physical structure, i.e., a Shore A hardness of not less than 92 and a moisture content of 150ppm or less. Hence, since the disclosure does not teach one of ordinary skill in the art how to make a nonwoven fabric from a polyurethane material having a

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different Shore A hardness or moisture content, the Applicant cannot claim a nonwoven polyurethane fabric made from any starting material.

In fact, various types of polyurethanes can be made to produce various types of nonwoven fabrics, some of which would have similar properties to those claimed by the Applicant, and some of which could have identical properties to those claimed by the Applicant, but with a different starting polyurethane, and thus, a different physical structure than that taught by the Applicant. Since the Applicant can only claim that which they have disclosed in the specification, regardless of whether the claim recites method limitations or not, the claim is not enabled since the disclosure does not teach how to produce the nonwoven fabric from any type of polyurethane as presently claimed, only a specific polyurethane starting material.

Further, the Applicant argues that nothing in the present specification states that the claimed product can be manufactured only by the process steps disclosed there. However, the Comparative Examples and the Applicant's declaration show exactly that. The Examples show that changes in the extrusion and depositing temperatures will produce different properties which indicate the fibers have a different structure. Thus, the structure of the fiber and nonwoven fabric is a result of the method itself and the physical fiber structure would clearly be different from the fibers disclosed in the specification, i.e., outside the scope of the disclosure, if the processing parameters are modified. Therefore, the entire scope of the claim is not enabled, since the claim is broader than the limited disclosure of the polyurethane nonwoven material produced by the process of the specification.

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5. Claims 1 and 3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claims 1 and 3 are indefinite because they claim the properties of the nonwoven polyurethane fabric, but fail to set forth the specific structure of the polyurethane nonwoven fabric which produces these properties. Claims that merely set forth physical characteristics desired in an article, without setting forth specific compositions which would meet such characteristics are invalid as vague, indefinite, and functional since they cover any conceivable combination of ingredients either presently existing or which might be discovered in the future. *Ex parte Slob* (PO BdApp) 157 USPQ 172. The Applicant is claiming the product by what it is intended to do, and not by what the product is. The Applicant has failed to set forth the specific structural limitations of the claimed polyurethane nonwoven fabric, except for the recitation that the fabric is made with polyurethane filaments and the filaments are fused together at points.

As mention above the Applicant does not think it is necessary to add process limitations to the claim to define the structure of the product, since process limitations are not given weight with regards to the patentability of a product. However, in cases where the process limitations manipulatively effect the structure of the product, method limitations are given weight based on the structure they produce. Further, it is noted that the Examiner suggested that the Applicant add the method limitations to overcome the present rejection, the Examiner did not state that the Applicant was required to add the method limitations. If the Applicant would like to define the fabric structure differently, the Applicant is allowed to do that. However, as set forth above,

physical properties are not sufficient limitations to define the structure of a product. Physical properties are a result of the physical structure, but not a positive structural feature.

While properties are a direct result of the physical structure of the product, properties do not positively define a specific structure. Specifically, in the case of polymers and fibers produced therefrom, the crystalline structure produced during manufacturing directly determines the fibers strength, elongation, and recovery properties. If one were to take the exact same polymer and melt spin the polymer into a fiber on two different machine lines, where one line is set up with different parameters than the other line, the two fibers produced would have noticeably different properties with respect to tensile strength, elongation, and elasticity, since the fibers would have different internal crystalline structures. Hence, the processing limitations used to produce a fiber directly determines the physical structure of a fiber. This is clearly demonstrated by Applicant's Comparative Example 4, which uses the exact same starting material as Example 1, but the polymer is only dehydrated to a moisture content of 350. As a result the polymer cannot even be used to produce a fiber or nonwoven fabric because of yarn breakage and foaming in the polymer melt. Conversely, fibers with different physical structures can have still have similar properties or groups of properties. For example both polyurethane and natural rubber are highly elastic materials with good recovery after elongation.

Therefore, defining the fabric as a polyurethane nonwoven fabric, does not define the structure which produces the claimed properties. Particularly the claims are indefinite since they fail to specify the particular composition which would impart the required characteristics set forth in the claims. *Austenal Laboratories Incorporated v. Nobelium Processing Company of Chicago et al.*, 115 USPQ 44 (DC NI11 1957). At issue in Austenal is a group of claims which

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list a group of functional properties desired in the final product and recite that the product consists "essentially of rosin derivatives and ethyl cellulose". The decision states that these claims are vague and indefinite because thousands of rosin derivatives and thousands of ethyl cellulose derivatives exist, and when these compositions are combined in any give proportion literally thousands of different results would be produced, possessing different physical and chemical properties. Thus, the claims are indefinite since they fail to specify the particular rosin derivatives, grade of ethyl cellulose, and the particular proportions thereof, which, when mixed, would impart the required characteristics set forth in the claims. Similarly, in this application, the Applicant recites that the composition comprises polyurethane and then lists various physical properties that material possesses, instead of the actual polyurethane composition and physical structure of the fibers in the nonwoven fabric. Further, it has been held that it is necessary that the product be described with sufficient particularity that it can be identified so that one can determine what will and will not infringe. *Benger Labs. Ltd. V. R.K.Laros Co*; 135 USPQ 11; *In re Bridgeford* (CCPA 1966) 149 USPQ 55; *Locklin et al. v. Switzer Bros., Inc.* 131 USPQ 294. Finally, it has been held that reciting the physical and chemical characteristics of the claimed product will not suffice where it is not certain that a sufficient number of characteristics have been recited that the claim reads only on the particular compound which has been invented. *Ex parte Siddiqui* 156 USPQ 426; *Ex parte Davission et al.* 133 USPQ 400; *Ex parte Fox* 128 USPQ 157. Thus, the rejection is maintained.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Befumo whose telephone number is (571) 272-1472. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0994.

Jenna-Leigh Befumo
January 7, 2004



CHERYL A. JUSKA
PRIMARY EXAMINER